

Applicants: Andrew R. Marks and Steven O. Marx
Serial No.: 09/766,944
Filed: January 22, 2001
Page 3

Amendments to the Claims

Please cancel claims 1 and 2 and non-elected claims 7-18 without disclaimer or prejudice to applicants' right to pursue the subject matter of these claims at a later date in a continuing application.

In accordance with 37 C.F.R. §1.121 (revised amendment format), please amend claims 19 and 21 as indicated below. The text of all claims under examination is provided below, with deleted matter indicated by strikethrough and added matter indicated by underlining. These markings have been made only in claims being currently amended.

Claims

1-2. (Cancelled)

3. (Original): A method of treating a subject's cardiovascular disease, which comprises administering to the subject a compound which increases intracellular cyclin-dependent kinase inhibitor, p27 activity, thereby alleviating the subject's cardiovascular disease.

4. (Original): The method of claim 3, wherein the cardiovascular disease is atherosclerosis, arteriopathy after heart transplantation, or restenosis after angioplasty or coronary stent placement.

5. (Original): A method of inhibiting tumor metastasis in a subject, which comprises administering to the subject a compound which increases intracellular cyclin-dependent

Applicants: Andrew R. Marks and Steven O. Marx
Serial No.: 09/766,944
Filed: January 22, 2001
Page 4

kinase inhibitor p27 activity, thereby inhibiting tumor metastasis.

6. (Currently amended): The method of claim 1, 3, or 5, wherein cyclin-dependent kinase inhibitor p27 activity is increased by increasing C3 exoenzyme activity.

7-18. (Cancelled)

19. (Currently amended): A method of treating a subject with a cardiovascular disease which comprises administering to the subject a therapeutically pharmaceutically effective amount of a chemical compound ~~identified by the method of claim 7 or 9 that inhibits cellular migration, or a novel structural and functional analog or homolog thereof,~~ wherein said compound is identified by a first method which comprises (a) contacting (i) cells whose migration is inhibited when intracellular cyclin-dependent kinase inhibitor p27 activity is increased, or (ii) an extract from such cells, with the compound under conditions suitable for increasing p27 activity, and (b) determining whether p27 activity increases in the presence of the compound, an increase in p27 activity identifying the compound as a compound which inhibits cellular migration; or alternatively, by a second method for screening a plurality of compounds not known to inhibit cellular migration, to identify a compound that inhibits cellular migration, which method comprises (a) contacting (i) cells whose migration is inhibited when intracellular cyclin-dependent kinase inhibitor p27 activity is increased, or (ii) an extract from such cells, with the plurality of compounds under conditions suitable for increasing p27

BD
CMF

Applicants: Andrew R. Marks and Steven O. Marx
Serial No.: 09/766,944
Filed: January 22, 2001
Page 5

activity; (b) determining if p27 activity is increased in the presence of the plurality of compounds; and (c) if p27 activity is increased, separately determining if p27 activity is increased in the presence of each compound included in the plurality of compounds, so as to thereby identify any compound included therein as a compound which inhibits cellular migration.

20. (Original): The method of claim 19, wherein the cardiovascular disease is atherosclerosis, arteriopathy after heart transplantation, or restenosis after angioplasty or coronary stent placement.

21. (Currently amended): A method of inhibiting tumor metastasis in a subject which comprises administering to the subject a therapeutically pharmaceutically effective amount of a chemical compound identified by the method of claim 7 or 9 that inhibits cellular migration, or a novel structural and functional analog or homolog thereof, wherein said compound is identified by a first method which comprises (a) contacting (i) cells whose migration is inhibited when intracellular cyclin-dependent kinase inhibitor p27 activity is increased, or (ii) an extract from such cells, with the compound under conditions suitable for increasing p27 activity, and (b) determining whether p27 activity increases in the presence of the compound, an increase in p27 activity identifying the compound as a compound which inhibits cellular migration; or alternatively, by a second method for screening a plurality of compounds not known to inhibit cellular migration, to identify a compound that inhibits cellular migration, which method comprises (a) contacting (i) cells

BDW

Applicants: Andrew R. Marks and Steven O. Marx
Serial No.: 09/766,944
Filed: January 22, 2001
Page 6

B1

whose migration is inhibited when intracellular cyclin-dependent kinase inhibitor p27 activity is increased, or
(ii) an extract from such cells, with the plurality of
compounds under conditions suitable for increasing p27
activity; (b) determining if p27 activity is increased in
the presence of the plurality of compounds; and (c) if p27
activity is increased, separately determining if p27
activity is increased in the presence of each compound
included in the plurality of compounds, so as to thereby
identify any compound included therein as a compound which
inhibits cellular migration.